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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,761	02/20/2002	Sang-Ho Chun	P56669	3465

7590 03/17/2004  
Robert E. Bushnell  
Suite 300  
1522 K Street, N.W.  
Washington, DC 20005

EXAMINER

WILLIAMS, JOSEPH L

ART UNIT PAPER NUMBER

2879

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/077,761	<b>Applicant(s)</b> CHUN ET AL.	
	<b>Examiner</b> Joseph L. Williams	<b>Art Unit</b> 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 13-15, 17 and 18 is/are rejected.
- 7) ☒ Claim(s) 7-12, 16, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 13-15, 17, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Bae et al. (US 6,614,153).

Regarding claim 1, Bae ('153) discloses in figures 1 and 7 and in column 5, line 31 through column 6, line 65, an apparatus comprising: a tension mask (80) having a screen part for transmitting electron beams, the screen part having a first area (no number) including a center region of the screen part, and having a second area (moving away from the center) distinguishable from the center area and not including the center region of the screen part; and a mask frame (63) coupled to the tension mask for reinforcing structural strength of the tension mask while applying tension to the tension mask; the screen part including a plurality of real slots (82), dummy slots (no number,

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after (87) bridge) and strip parts (81, 86, 86') the real slots being located in the first area, the dummy slots being located in the second area.

Regarding claim 2, Bae ('153) discloses the real slots in the first area being formed by a plurality of real bridges (83) in the first area, each real bridge connecting adjacent ones of the strip parts to each other, the dummy slots in the second area being formed by a plurality of dummy bridges (87) in the second area.

Regarding claim 3, Bae ('153) discloses the first area being symmetrically formed around a first axis and being symmetrically formed around a second axis perpendicular to the first axis.

Regarding claim 4, Bae ('153) teaches the first axis and second axes passing through a center point at a center of the screen part.

Regarding claim 5, Bae ('153) discloses the screen part having a first edge region substantially parallel to an X axis, the first area being symmetrically formed around a first imaginary line parallel to the X axis, the first area being symmetrically formed around a second imaginary line perpendicular to the X axis.

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Regarding claim 6, Bae ('153) teaches the first and second imaginary lines being straight lines passing through the center point at a center of the screen part.

Regarding claim 13, Bae ('153) discloses in figures 1 and 7 and in column 5, line 31 through column 6, line 65, an apparatus comprising: a tension mask (80) having a screen part for transmitting electron beams, the screen part having a first area (no number) including a center region of the screen part, and having a second area (moving away from the center) distinguishable from the center area and not including the center region of the screen part; and a mask frame (63) coupled to the tension mask for reinforcing structural strength of the tension mask while applying tension to the tension mask; the screen part including a plurality of real slots (82), dummy slots (no number, after (87) bridge) and strip parts (81, 86, 86') the real slots being located in the first area, the dummy slots being located in the second area; the first area including an upper and lower part, the upper part being spaced apart from the lower part, a center point at the center of the screen part being located between the upper and lower parts.

Regarding claim 14, Bae ('153) discloses the real slots in the first area being formed by a plurality of real bridges (83) in the first area, each real bridge connecting

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adjacent ones of the strip parts to each other, the dummy slots in the second area being formed by a plurality of dummy bridges (87) in the second area.

Regarding claim 15, Bae ('153) discloses the screen part having a first edge region substantially parallel to an X axis, the first area being symmetrically formed around a first imaginary line parallel to the X axis, the first area being symmetrically formed around a second imaginary line perpendicular to the X axis.

Regarding claim 17, Bae ('153) discloses in figures 1 and 7 and in column 5, line 31 through column 6, line 65, an apparatus comprising: a tension mask (80) having a screen part for transmitting electron beams, the screen part having a first area (no number) including a center region of the screen part, and having a second area (moving away from the center) distinguishable from the center area and not including the center region of the screen part; and a mask frame (63) coupled to the tension mask for reinforcing structural strength of the tension mask while applying tension to the tension mask; the screen part including a plurality of real slots (82), dummy slots (no number, after (87) bridge) and strip parts (81, 86, 86') the real slots being located only in the first area, the dummy slots being located only in the second area; the screen part having a first edge region substantially parallel to an X axis, the first area being symmetrically formed around a first imaginary line parallel to the X axis, the first area being symmetrically formed around a second imaginary line perpendicular to the X axis.

Regarding claim 18, Bae ('153) discloses the first area being formed in a rectangular shape.

***Allowable Subject Matter***

3. Claims 7-12, 16, 19, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Williams whose telephone number is (571) 272-2465. The examiner can normally be reached on M-F (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Joseph Williams**

**Examiner**  
**Art Unit 2879**